THE MARINE RECORD.

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AROUND THE LAKES.

CLEVELAND.

The ore docks at Escanaba are reported to be full of ore and some of the ore trains have been suspended owing to the lack of tonnage.

The schooner James Couch, Captain W. Mack managing owner, was in Globe dry dock last week to have a leak stopped. The schooner Delaware will go into Globe drydock where she will receive half new centreboard and other necessary repairs. The Oscoda will go in the dock for a new wheel.

Hon. F. H. Braggins, a Leader editor man, has accepted the position of smoke inspector in this city. Mr. Braggins is an inveterate smoker himself and will therefore regard the feelings of the stoker.

The steamer Keweenaw put in here yesterday on her first trip, Buffalo to Green Bay, and took on freight and passengers at Captain J. W. Brett's dock. She looks as fresh as a sunflower.

The Globe will commence putting the boiler into the new iron side wheeler to-day. This is the largest boiler ever built for a lake craft, 13 feet in diameter, 16 feet long 27 feet to the top of steam chimney. It is built entirely of steel, and allowed a pressure 71 pounds to the square inch.

The schooner Erastus Corning, while being towed down the river by the little tug C. E. Bolton on Saturday, ran her jibboom into the upper story of Sells' warehouse, the spar coming out through the roof, where it broke off. The tug was too light to hold the schooner when the current struck her. Captain Foster says he ordered two tugs and Captain Greenhalgh says only one.

The steamer Selah Chamberlain, Captain James Lawless had her bottom thoroughly recalked at the Globe drydock this week. She brought down from Marquette 1,400 tons of hemitite ore, consigned to Huron, Ohio, where the facilities for dispatch in discharging ore and taking on coal are equal to any on the lakes. The Chamberlain's cargo was taken out in twenty-four hours. The Wheeling and Lake Erie railroad, O. C. Stedman, agent at Huron, has determined that if accomodations and dispatch will have its legitimate effect, Huron will soon loom up as a desirable port to consign to, and there being plenty of water for fifteen feet draft there is no reason why their efforts will not bear fruit.

Bids for a last contract for the improvement of Ashtabula harbor were opened by Major Overman, U. S. Engineer, at this port on Monday, with the following result, the sums connected with each name being the aggregate amount for which each proposed to do the work. Messrs. Hingston & Woods, of Buffalo, N. Y., $9,792.60; Alonzo F. McKenzie, of Ashtabula, $9,383.95; L. P. & J. A. Smith, Cleveland, O., $9,357.28; Gilman, of Lorain, O., $15,968.95. Messrs. L. P. & J. A. Smith, are the lowest bidders and have been awarded the contract subject to the approval of the chief engineer at Washington, D. C. This enterprising firm will begin on the work as soon as the necessary papers, are signed, which will probably be brought about in about ten or fifteen days.

A slight collision in the river on Tuesday evening resulted in damages to the extent of $200 to the barge Matilda in tow of the tug Record and about the same sum to a scow in tow of the tug Patrick Henry. Each master thinks the other at fault and the matter will probably be settled by arbitrators. As is customary when rounding the turn in the river the Record sounded her whistle claiming the starboard side, and pulled close into Fisher & Wilson's dock, where the barge was to discharge her lumber. While the barge was some fifteen or twenty feet astern, the tug Patrick Henry came down with two scows in tow, and one of the scows struck the Matilda just below the water line, making quite a hole. The barge filled rapidly but her heavy load of lumber prevented her from sinking. She will be pumped out and go into dock for repairs. The scow was damaged at both ends. Mr. Fisher, who stood on the dock says the Patrick Henry did not answer the signal of the Record.

CHICAGO.

Special to the Marine Record.

June 16—The schooner A. P. Nichols arrived here Saturday in tow of the Milwaukee tug Kitty Smoke. She was laden with a cargo of cedar posts and bound from Green Bay to this port and when about 10 miles off Milwaukee on Thursday evening she collided with the schooner Saveland also bound to this port with iron ore from Escanaba. The Nichols lost her jibboom bow sprit and headgear and damaged her stem and the Saveland which arrived here Friday night, was minus a portion of her rail and bulwarks and some stanchions.

The schooner Westchester bound to this port with cedar posts from Leathamville went ashore on Plumb Island, Deaths Door last Friday night in a fog.

The side wheel pleasure excursion steamer Saginaw, was going to Miller Brothers shipyard Monday afternoon to get a new afterbrace to the gallows frame, when finding that she was too wide to go through the draw of Indiana street bridge, she lay at a dock on the West side near the bridge and men and material were sent along to get the work done there. A large amount of controversy has gone the rounds of the Chicago papers as to the safety of this boat which seems very unfair to her owner. Captain J. M. Mitchell assured me that she underwent a thorough rigid, examination by the inspectors at Detroit and the result was that she received a permit to run as a passenger boat on the lakes and to carry 63 passengers, which is the number of berths she has for their accommodation. On her arrival at this port application was made to Captain Warren, local inspector, for a permit to carry 500 passengers on excursions a few miles out and back. This he refused to grant, without even giving her an examination and Wm. Cook, supervising inspector of this district, was at once sent for, who granted her a permit to carry the 500 passengers and at once reported the matter to the authorities at Washington. What the result will be remains to be proved. The Saginaw has been making daily trips and will go to Muskegon next Thursday. Captain Mitchell considers her safe and seaworthy, otherwise he would not go on her. She carries 644 cork life preserver in case of accident.

O. S. Richardson & Co. are having the piles driven for a new dock 150 feet in length adjoining their dock at 270 Elston avenue near West Division street bridge. This will allow two vessels to unload at a time and will increase their coal yard to nearly double its present size.

There was a strike on Monday of the union men unloading coal up the north branch; they demanded 14c per ton, instead of 12c. This was refused by one firm of coal dealers and some non-union men were set to work, which resulted in a set-too between the two factions and some arrests were made by the police.

The schooner Maggie Thompson ran into the south approach of Wells street bridge, when going down the river in tow of the tug Hackley Monday evening. The Jewett was going down through the north draw of the bridge at the same time and the current from her wheel rendered the schooner unmanagable. The Thompson carried away her martingale guys and bobstay and did some trifling damage to the wood work on the bridge approach.

The steamship J. H. Devereux, Captain Wilford, arrived Tuesday morning on her second trip with 2218 tons of coal from Ashtabula, which she carried on 14 feet 9 9 inches draft aft and 14 feet 7 inches forward; she towed the schooner Canton from Cleveland to Racine.

Transfers and sales recorded at Chicago Custom House, June 12, steam canal boat Bond C., mortgage $4,500, whole, D. E. Corneau to the Singer and Talcott Stone Company.

June 12, schooner Cascade, mortgage $1,500, whole Minnie E. Howards to J. P. Fowler.

Flags on all the line boats in the harbor have been at half mast in consequence of the death of President Rutter, of the New York Central railroad.

The schooner Mercury, Captain Lester Sterling, collided with the schooner J. M. Hutchinson, near the central slip, when she was being towed down the river on Saturday. The Mercury's fore topmast and the Hutchinson's mizzen boom were carried away.

Saturday afternoon the propeller W. J. Averill collided with State street bridge as she was going up the river. The bridge was closed at the time, but through the second engineer misunderstanding Captain Bailey's signal to back her, he made her go ahead and she crashed into the bridge on the north side, knocking it half way open. A street car, with some twelve passengers, was approaching the south end of the bridge at the time, and the horses fell over, but luckily the car did not go off the bridge. One lady got her ankle fractured when getting off the car. The horses swam, one up the river and the other down, and were both rescued. The upper part of the bridge does not appear to be much injured, but the iron work under the bridge is badly damaged, and it has not been swung for passenger traffic since the accident up to the time of this writing.

The schooner Orphan Boy, with lumber from Saint Ignace, arrived here Tuesday about noon, and the schooner Belle Brown with telegraph poles from Bay City the same day about 3 p. m. The two schooners had been in collision off Sheboygan, Wis., the Orphan Boy having lost her jibboom, bowsprit, port cat head, port anchor stock, head gear and had some of her forward sails damaged. The Belle Brown carried away two of her jibs and some of her rigging and sustained some damage to her rail. Captain Holliday, of the Orphan Boy, states that at about 4 a. m., Monday, his schooner was standing to the S.E., going about 3½ miles per hour, starboard tacks aboard, and the Belle Brown, with port tacks aboard, standing to the westward; weather thick. The lookout on the Orphan Boy saw the Belle Brown approaching and reported a vessel on the lee bow, and the helm of the Orphan Boy was put hard down. He hailed the Brown, requesting that her helm be put hard down also, but he got no reply, and the Brown continued on her course and collided with the Orphan Boy, she being at the time head to wind and about to go in stays.

The regular meeting of the Marine Engineers' Association, No. 4, was held Tuesday evening at No. 182 East Madison street, James Buck presiding. Under the Dingley bill, which went into force July 1, inst., aliens are prohibited from being licensed to serve as officers on board any American vessel. The object of the meeting was for the purpose of ascertaining to what extent the law was being enforced, and to improvise means to secure the strict observance of the measure, and otherwise to provide for the protection of those entitled to license. Correspondence has been had with different organizations throughout the country, and from these it was learned that the law was working advantageously. At Detroit a foreign corporation, which disputes the constitutionality of the law, propose to test the same before the United States court, and no inconsiderable interest is manifested in the proceedings, which will be instituted at an early day.

WILLIAMS.

BAY CITY.

Special to the Marine Record.

June 16—A raft of 120,000 feet of square timber is being made up by McArthur Bros. near Wheeler's boxes and will be towed to Quebec thence onto vessels for England this makes the third raft of the kind this season that has been sent from the river.

The tug Crusader was at the Rifle river this week for a large raft for Lake Erie.

A fire broke out in the cabin of the propeller Wm. St. John on Wednesday night just after leaving Heisterman Island, the new summer resort. It was extinguished with great difficulty. A number of passengers were on board who were pretty well frightened. The fire caught from the boiler.

A number of angry stevedores, who worked for a jobber on the barge Agnes, on Tuesday last applied to the police for redress, but it was such a difficult thing to ascertain who the jobbers were that nothing could be done, and the gang resolved never to work for a jobber again.

Manager Armstrong, of the Saginaw river fire tug patrol boats, is now making a specialty of washing out, cleaning and refilling lake tugs and steambarge boilers that are trading at this port. He can be reached by telephone and will call at any mill on the river where steambarges may be loading, and do the work without loss of time, at the reasonable price of $4.

The tugs Effie L. and Ralph each received $100 for services rendered at the great lumber fire at Alpena.

Numerous hookers are arriving in the river daily with cedar posts for paving purposes.

The steamer J. C. Licken is now making regular trips between Bay Port and Heisterman island, the new summer resort.

John Lund, the fireman on the steamer Mason, who was so badly scalded by a steam flue cleaner last week, is getting along nicely and expects to be at work again in a week or so. His face will be disfigured for life, however.

The M line schooner A. T. Bliss is loading at Backus & Bender's mill what is known as the Ward pure stock. It was sold at the extravagant price of $25 per thousand feet, straight measure. The Bliss will take about 580,000 feet, making her cargo the most valuable that has been shipped out of the river for years. It goes to Albany parties.

B. Whitham & Company's Bay City drydock have taken a contract to rebuild the schooner Golden Harvest, on her return to this port from Cleveland with a load of block stone.

The Local Brotherhood of Engineers are still working up the name of Jos. Blanchard for local inspector of steamboat boilers.

The schooner Harvey Bissell, that recently received thorough repairs at Wheeler & Company's boxes, is now painting up and fitting out for the ore and coal trade. She looks like herself again.

The frames are up at Davison's shipyard for a tug something after the model of the Tom Maytham. If she is as good as the Tom she will be a dandy.

The steambarge Bruno and consorts Laura and Maggie McRae, with a very valuable consignment of ship building square timber left the river to-day for Kingston.

Monday night about 9:30 p. m. the little hooker W. T. Chappell, gravel laden, from Mackinac island, and in tow of the steamer St. John, struck the 3d street bridge while passing through. Her forward rigging on her starboard side was carried away, and considerable other damage done. The bridge men say the captain of the Chappell having no light out is at fault, while the captain claims that the men on the bridge were to blame.

The schooner Home while entering the river under sail last night missed the channel and went aground. She was pulled off.

SHAW.

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MARITIME LAW.

THE WILLIAM F. M'RAE—LIBEL FOR COLLISION—DISMISSAL SUBSEQUENT LIBEL BY WIFE AS OWNER.

District Court E. D. Michigan, January 26, 1885.

James J. Atkinson, for libelant.

J. W. Finney, for claimant.

Brown, J.

That a vessel discharged from arrest upon admiralty process by the giving of a bond or stipulation for her value, or for the payment of the amount claimed in the libel, returns to her owner freed forever from the lien upon which she was arrested, and can never be seized again for the same cause of action, even by the consent of parties, is a proposition too firmly established to be open to question. The Kalamazoo, 9 Eng. Law & Eq. 557; the Wild Ranger, Brown & Lush. 84; the Union, 4 Blatchf. 90; the White Squall, 4 Blatchlf. 103; the Old Concord, 1 Brown, Adm. 270; the Josephine, 4 Cent. Law J. 262.

The general principle is further illustrated in the case of the Thales, 3 Ben. 327. In this case, a libel was filed against the bark Thales to recover a balance remaining due for certain repairs, etc. Subsequently, this suit was discontinued and the costs paid. Still later, another libel was filed by the same libelants for the same cause of action, and the vessel arrested and bonded a second time. It was insisted that the discontinuance of the former suit, with the cousent of the claimants therein, and the payment of the costs, which had been accepted by them operated to make the arrest of the vessel in the second suit an original arrest, and not a second arrest. It was held, however, that the case fell within the principle of the Union and the White Squall and that the court had power, in the absence of fraud or mistake, no to order her arrested a second time, and that the fact that the first suit was discontinued with the consent of the claimants indicated no intention, actual or in law, to subject the vessel to a second arrest, or to wave the rights in that respect which then belonged to them. This case was affirmed by Judge Woodruff upon appeal to the circuit court. 10 Blatchf. 203.

There is occasionally, however, difficulty in determining whether the second arrest is for the same cause of action as the first. Thus a libel by the owner of a ship for damages by collision would obviously be no bar to a second action by the owner of the cargo for damages suffered by him in the same collision, although it has been held, doubtless correctly, that if the ship owner sues for damages both to the ship and cargo, as he may do under the practice of the admiralty courts, the owner of the cargo cannot afterwards file a libel in his own name, but must petition to be made a co-libelant in the first suit. The Nahor 9 Fed. Rep. 213. In delivering the opinion in this case, Judge Choate remarked that "the vessel, having given bail for the value of the cargo in the first action, and the action being properly brought by the master and owners, as carriers, for the loss of the cargo, she was not liable to be again arrested for the same cause of action."

The rule, then manifestly applies only to those cases wherein the libelant might have asserted his rights in the first action; and the real question in this case is whether the libelant was not bound to appear in the suit begun by her husband, and ask to be made a co-libelant, or be substituted for him as sole libelant. Although it is not expressly averred in the answer in this case, it appears by the record of the former case that George McClure, the husband of the libelant, filed his libel for this collision October 6, 1883, averring himself to be the owner of the Frank Morris; and that his libel was dismissed April 7, 1884, for failure to file security for costs. Pending her husband's suit, and on the tenth of December, 1883, Elizabeth McClure, the present libelant, appearing by the same proctors, and claiming herself to be the owner of the injured vessel, filed her libel in the exact language of the first libel, except in respect to the allegation of ownership, and procured a second arrest of the vessel for the same collision. Under these circumstances, three can be no question that she had legal notice of the pendency of her husband's suit. Could she have been substituted in place of her husband as sole libelant in that suit? I should have had little hesitation in saying that she could, were it not for the opinion of Mr. Justice Swayne in the case of the Detroit, 1 Brown, Adm. 141.

This was a suit for towage services, begun in the name of John K. Harrow, who was supposed to be the owner of the tug. After answer filed, and the testimony of one witness had been taken, it was discovered that James P. Harrow was the owner of the tug at the time the services were performed. Upon an affidavit that the proctor had been misinformed at the time the suit was commenced, an amendment was permitted, substituting James P. for John K. Harrow as libelant. A motion to vacate the order permitting the amendment was afterward made, and denied by the district court. On appeal to the circuit court it was held by the learned justice that there was no authority to make this order, and that the sub-titution of one sole libelant for another is substantially the institution of a new suit. This point was not decided in view of the contingency which has arisen here; and the general rule that a vessel once arrested and bonded is to be regarded as forever freed of that lien, appears to me to be so wholesome a one that I am unwilling to admit exceptions to it, unless in a very clear case. With the utmost respect for the learned justice who decided the case of the Detroit, I am constrained to say that I think the technical rule that one libelant can be substituted for another ought to give way to the general rule above stated, and to the still more equitable principle that where an action is substantially between two vessels, a mistake of the pleader as to the ownership or legal title of the injured vessel (a mistake which in actual practice is very likely to occur) ought to be corrected by an amendment. It was decided by the supreme court in the Commander in Chief, 1 Wall. 43, that new parties may be added, and parties improperly joined may, on motion, be stricken out. And in Jennings v. Springs, Bailey, Eq. 181, it was held to be within the discretion of the court to permit a bill to be amended by substituting the name of a new for an original complainant, even after answer filed. Here the bill had been filed by an agent of the real complainant.

But whether libelant could have been substituted for her husband or not, I see no objection to her being joined as co-libelant, and to the court making such decree upon the final hearing as to the distributiou of proceeds as the justico of the case might require. In the case of the Tillie, 13 Blatcht. 514, a canal boat wholly owned by a married woman was injured in a collision with a steam tug. Her husband filed a libel *in rem* in his own name, as owner, against the tug to recover damages sustained. On the trial, the wife testified as a witness for her husband, and gave material evidence to sustain his claim for damages. It was shown that in fact the action was brought by and with the assent of the wife, and it was held that the wife would be equitably estopped from bringing another suit, and that the libel of the husband could be maintained. If, from the circumstances of this case, an equitable estoppel could be said to arise, *a fortiori* would the wife be estopped if she appeared suit and asked to be made a co-libelant in her husband's with him.

While the operation of this rule may work a hardship to the libelant in this case, I do not see how, upon principle or authority, her suit can be sustained.

A MARINE INSURANCE CASE—THE LOSS OF THE CANALBOAT MONITOR.

Judge Blodgett decided the case of George F. Brown against the Union Insurance Company of Philadelphia. This was an action of assumpsit upon a policy of insurance on 5,800 bushels of corn which was shipped by the plaintiff in July last in the canalboat Monitor, to be carried from Morris, Ill., to Chicago. The amount involved was about $4,000. The canalboat was sunk near Cook's bridge, about twenty miles from Chicago, July 29. The insurance company refused to pay the loss, claiming that the boat was unseaworthy and unfit to carry grain, and that that was the cause of the loss. The case was tried before Judge Blodgett without a jury. The court decided that the burden of proof was on the plaintiff to show that when the vessel was lost without the intervention of any apparent peril that she was seaworthy at the inception of the risk, and that the loss was due to a peril insured against. The Monitor was built about 1862, and was rebuilt in 1878. Since then the repairs were very slight. The only cause which the plaintiff could assign for the boat springing aleak was that the captain about an hour before she sunk felt a slight jar, as if she had struck a floating log or stone in the bottom or bank of the canal. The jar, however, was not of sufficient force to give cause for alarm. Shortly after the vessel was found to be leaking, and she sunk in about an hour, while the pumps were working at their full capacity. The defendants offered proof that the vessel was very rotten, and showed signs of decay. The court found that the vessel was unseaworthy at the time of the issue of the policy. She was very old, and there was a time in the life of vessels when they were liable to give out. She had sunk either from an inherent defect or through striking her bottom against some obstruction in the bed of the canal, but the plaintiff had taken no trouble to prove which cause led to the sinking. The finding would therefore be for the defendant, except as to the premium and some salvage, which was to be paid by the defense. Messrs. Bisbee, Ahrens & Decker appeared for the plaintiff and Schuyler & Kremer for the defense.

NAUTICAL NOTES.

The damages to the barge L. C. Butts have been surveyed at $5,000.

The schooner Marengo fared badly in the storm of 7th having her jib and foreriggging carried away.

The schooner David Dows claims the palm for unloading 2,113 tons of soft coal at Duluth lately in fifteen hours.

The insurance companies have ordered a survey made of the tug Kate Moffat, which recently burned at Blue Point, Lake Huron.

The propeller St. John caught fire in her cabin above the boiler in Saginaw Bay on the 10th and narrowly escaped destruction. She reached Bay City and made repairs.

Propeller Cormorant, bound down, grounded on the middle ground near Round Island lighthouse in Sault river on the 11th and got off in a short time without damages.

The comfortable steamyacht Cyclone will soon make regular trips between Cleveland and Vermillion, stopping at Black river both ways. Captain Brown will be the skipper.

The big steamer George A. Bagley will be changed into a passenger boat and run in connection with the Utica & Black River railroad between Sacketts harbor and Henderson.

The cargo of the barge William, sunk at Lachine locks, consisting of 19,200 bushels of corn, was sold for 17 cents per bushel, which, with the duty and action charges, make the price 21 cents.

Deputy United States Marshal Cash P. Taylor tied up the barge Joseph at Detroit on a libel filed by Mary L. Gram, owner of the propeller Missouri. The attachments aggregate $485,50, which sum is alleged to be due for towing the Joseph.

The Canadian schooner Maple Leaf, which went on the beach in 1883 during a storm, was placed in dock at the Union yard Buffalo on the 6th. Captain Michael Carr is the owner. The Maple Leaf measures 141 tons and was built at Picton by Tait in 1880.

J. H. Gillett, of Marquette, who has the contract for the improvement of the harbor of Grand Marais, has a large force employed building cribs. He keeps a tug and two or three lighters at work conveying timber and stone from Marquette and vicinity to Grand Marais.

Captain Betelle sounded the whistle of the tug John Evenson in the draw of East Water street bridge, and a warrant was sworn out for his arrest. Captain Betelle is from Buffalo and has taken command of the Evenson. He is not familiar with Milwaukee ordinances.

The tug William A. Moore passed down Thursday night with a tow amounting to $663. This does not look as if the tug men were affected by the dull times, and yet a veteran tug owner says that during his long experience in the vessel business he had never seen business as flat as at present.

The mail steamer Corsican on the 11th at Toronto collided with the schooner Zebra in the channel. The schooner was cut down to the water's edge and Captain May was thrown overboard and injured. An action for damages will be entered against the Richelieu & Ontario Navigation company, who are the owners of the steamer.

The Sentinel says the spar for the Port Arthur Storm Signal recently erected on the L of the government dock stands just 80 feet above the water to the arm. The apparatus for signal is expected to arrive immediately, when it will be put in proper shape. Mr. Cook expects the Athabasca will bring the necessary appliances.

The propeller City of New York, after discharging her coal cargo at Milwaukee, which she had taken on at Buffalo, ran into the St. Paul Company's docks and damaged them about $200. The engineer was considered to blame and was discharged. It is not said whether any means had been taken to define the cause of tho accident.

The United States court at Detroit on Tuesday gave judgment in favor of the Northwestern Transportation company, owners of the steamer Manitoba, against the Continental and Union Insurance companies for $24,500. The Manitoba was wrecked in the fall of 1883 on the Canadian side of Lake Huron and was released the following spring. She has not yet been repaired.

The Canadian steamer Peerless took fire on the 9th at Montebello as she was about to leave with an excursion. The passengers were hastily landed and the steamer beached where she burned to the water's edge. The Peerless was an iron side wheel steamer, measuring 453 tons, and was employed on the St. Lawrence river as a passenger boat. She was built in 1875 and was owned by the Ottawa Navigation Company at Ottawa, Ont. and valued at $50,000.

There has been a spurt in lumber, last week at East Saginaw twelve to fifteen million feet having changed hands, a good portion of which is coarse lumber. The market in these stocks has dragged for some time past. Prices for coarse range from $8 to $10. Good stocks sell readily at $8 to $10, $16 to $20 and $36 to $38. Buyers are beginning to realize the shortage in the product this season and are taking hold.

The Welland canal men are sharp enough to look out for their pockets. Recently a change was made in the Canadian marine laws, by which none but full masters were allowed to come to Buffalo from Port Colborne for fuel. This shuts out about four-fifths of the tug masters. Now the owners hire a full master expressly to run the boats over and back. By this means the law is evaded and about $2 per ton saved on fuel as usual.

The Duluth Herald says a gas light is being put in the lighthouse on the north side of Superior entry which is very new and novel, and the first of the kind ever put on Lake Superior. It has to be changed only once in eight days, and will give a bright light twelve hours in every twenty-four. As there are no accommodations for living in this house and the sea is often so rough that it is impossible to go out there at night, the light will prove very valuable, as it lights itself

The schooner R. B. Hayes was libeled last Thursday at Cleveland for $1,515 93 by the owners of the tug Thomas Quayle. On the night of November 24, 1884. The tug left this port with the schooners Franz Sigel and R. B. Hayes in tow. In Point au Pelee channel the Hayes struck bottom, but was pulled off by the Quayle. She was slightly damaged and the owners of the Hayes libeled the Quayle for $1,630 93, claiming that the tug was at fault. The owners of the tug now present a cross-libel against the Hayes, claiming that she struck through the carelessness of her officers, and that therefore her owner should pay for damages to the tug incurred in pulling her off. The Hayes was not tied up, as the owners furnished bonds.

THE SAGINAW.

There has been considerable controversy between Captain John Warren, local inspector of hulls for Chicago, and Joseph Cook, supervising inspector of steam vessels for the upper lake district, about the steamer Saginaw, which recently came here from Detroit to engage in excursion business. When the Saginaw arrived on Saturday last Captain Mitchell, her master, made application to Captain Warren for a certificate permitting the Saginaw to carry 500 passengers on her excursion trips, but Captain Warren, instead of complying with the request, boarded the boat and made a hasty examination of her upper works and cabins. He hesitated about issuing a permit until he had made a more careful and complete examination of the steamer. Captain Mitchell insisted upon an immediate decision. Captain Warren wrote the following, which he delivered to Captain Mitchell in person:

"Your application for an excursion permit from Chicago to Lake Michigan during the present season has been refused for the following reasons: Your steamer is now nearly nineteen years of age and has not been running in this district for a number of years, so we have no means of knowing how stanch she may be, but I should judge from her present appearance that she would stand a poor chance in this narrow, crowded river. Chances of collision are so manifold that I believe it is no place for an old side wheel steamer with wide guards and loaded down with excursionists."

On Sunday morning Mr. Cook arrived from Detroit and went aboard the Saginaw without delay and granted her a permit to carry 550 passengers in addition to the 63 designated by the Detroit board as her capacity, and on Monday afternoon she went to South Chicago with a very large party of excursionists Mr. Cook and Mr. Stewart Moore, local inspector of boilers for this district, were on board the boat, and Cook expressed himself as highly pleased with her performance on her trip. On Monday he visited the local inspector's office in the government building and informed Captain Warren that he (Warren) had exceeded his authority; that he would report the case to the authorities at Washington as an infamous act of persecution. Captain Warren acted under rule seventy-eight, which leaves to the inspector the responsibility of limiting the number of passengers on each steamer.

THE NEW ELEVATOR.

Contractors are preparing proposals for the new elevator to be built this season on St. Clair river, east of McMorran & Co's flouring mill and north of the slip. The main building will be 100x50 feet and 64 feet high, with a tower about 42 feet high. It will be a frame structure, enclosed with iron, and will be covered with a shingle roof protected by fire-proof paint. The building will stand on 66 stone piers, and will be very substantial. It will contain 50 bins for storing grain, beside large receiving bins. There will be a marine leg on the river side for unloading vessels, and a railroad track will be laid on the west side between the elevator and mill so that cars can be run to the elevator.

The engine and boiler house will be located on the north side, and will be supplied with a 75-horse power engine and steel boiler from the Phœnix Iron Works. The elevator will have the latest improvements and when finished will be one of the most complete elevators in the west.—*Port Huron Times.*

THE STAR SAFETY RAZOR.

Patented June 15, 1880.

A great invention which renders shaving a convenient and easy luxury, and obviates all danger of cutting the face

Warranted to shave clean. Time and money saved. Delays in barber shops avoided. It is specially adapted to the aged and young; and is indispensable to all travelers by land and sea; to miners and to persons camping out; to the indolent and luxurious; to the man who wants a quick shave, and he whose skin is too tender to admit of the application of the ordinary razor. Once used you will never be without it. Requires no practice. Every man his own barber.

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FOR SALE,

A Fine Harbor Tug.

Dimensions of hull 65 feet over all, 16 feet beam, 8 feet hold, and measures 46 tons with 7 feet draft; can be made 6 feet draft. The engine, 18x20, is in first-class condition, with all new brasses, new rings in cylinder and turns a six-foot wheel, which was new last season. The boiler is one year old, is large enough to burn wood or coal and is allowed 100 pounds of steam. Price $4,500, and must be sold inside of thirty days. Address MARINE RECORD OFFICE.

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ROCKY MOUNTAINS,

Yellowstone Park, California and all Points West, via

BEE LINE.

CLEVELAND, COLUMBUS, CINCINNATI & INDIANAPOLIS.

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Reduced rates in general at hotels, for carriage drives, for ponies into the mountains, &c., &c. No grander or more health giving and profitable vacation can be planned. Now is the time to see this vast mountain region, with its most gorgeous and fascinating scenery, under the direction of an experienced guide and at greatly reduced cost over any independent method.

A Grand Party! A Grand time for a vacation! A Grand Opportunity! Improve it.

Full information can be obtained of ticket agents.

LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, May 24, 1885, at 12 o'clock noon the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	°2 55 A M	°3 15 A M
No 8, N Y, B & A Express	°8 20 A M	°8 45 A M
No 26, Elyria Accommodation	†7 45 A M	.....
No 35, Buffalo Ac'm via Sandusky	†10 30 A M	†10 50 A M
No 35, Toledo Accom via Norwalk	†10 30 A M	†10 50 A M
No 12, N Y & B Fast Express	°1 55 P M	°2 25 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	°12 15 A M	°12 25 A M
No 23, Mich Express via Sandusky	°2 15 A M	
No 3, Chicago Express via "	‡6 05 A M	6 30 A M
No 25, Mich Accom Norwalk	.....	†6 30 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 30 P M
No 5, St Louis Ex via Sandusky	°10 30 A M	°10 40 A M
No 9, Chi Pac Ex via Norwalk	6 15 P M	°6 40 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 8:15 a. m, and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m, and 3:45 p. m.

Reference marks—° Daily, † daily, except Sunday, ‡ daily, except Monday.

A local Cleveland and New York sleeper daily on No. 12, leaving Cleveland at 2.25 p. m.; arrive Grand Central depot, New York, 10 30 a. m

For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

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NEW YORK, CHICAGO & ST. LOUIS RAILWAY.

The passenger equipment of this New Trunk Line is all new and is supplied with the latest appliances necessary to safe speedy and comfortable travel.

Trains leave and arrive at the Union Depot, Van Buren street, Chicago, and N Y, L E & W R'y depot at Buffalo.

Following is the time in effect March 22, 1885, and until further notice:

GOING EAST.	LV.	AR	GOING WEST.
A. M.			P. M.
..... 7 50	..... Chicago		7 50 .....
..... 9 50	..... Valparaiso		5 42 .....
P. M.			
..... 1 50	..... Fort Wayne		2 10 .....
..... 2 05	..... New Haven		1 35 .....
			A. M.
..... 3 48	..... Leipsic		11 36 .....
..... 4 46	..... Arcadia		10 35 .....
A. M.			P. M.
6 50 5 00	..... Fostoria		10 22 8 50
7 35 5 45	..... Green Springs		9 44 8 05
8 15 6 20	..... Bellevue		9 20 7 40
10 45 9 02	AR ..... Cleveland	LV	6 45 4 51
11 55	..... Painesville		..... 3 34
P. M.			
12 44	..... Ashtabula		..... 2 43
1 14	..... Conneaut		..... 2 13
2 33	..... Erie		..... 12 50
			A. M.
4 09	..... Dunkirk		..... 11 16
			A. M.
5 45	AR ..... Buffalo	LV	..... 9 40

ROCKY RIVER ACCOMMODATION.

Depart—7:45 a. m., 1:35 p. m.

EUCLID AVENUE ACCOMMODATION.

Depart—6 24 a. m, 9:10 a. m,. 5:05 p. m.

All trains daily except Sunday.

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination

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Gen'l Passenger Agent,

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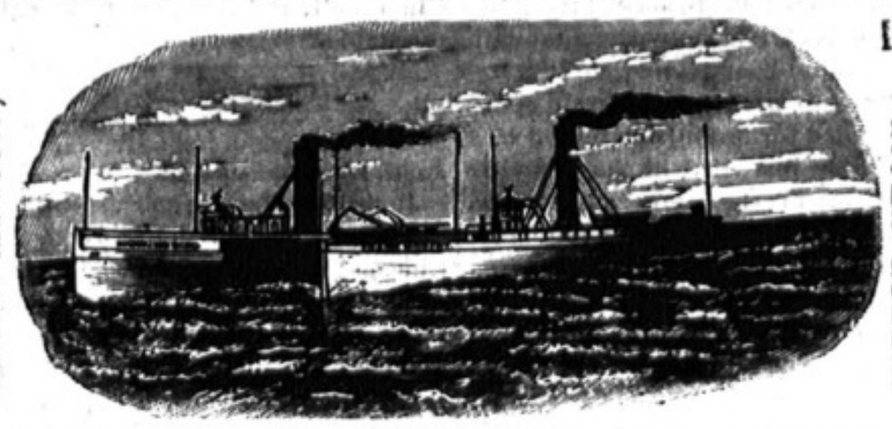
MOFFAT TUG LINE.

TUGS. MOCKING BIRD, JOHN MARTIN, FRANK MOFFAT,



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WROUGHT STEEL RANGES
FOR STEAMBOATS,
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No. 9x26 Wrought Steel Range has one oven 26x26 and 15½ high, has 6 9-inch boiler holes, top cooking surface 3 feet 10 inches by 3 feet.

No. 9x26 Range has 10 9-inch boiler holes Size of ovens 26x26 inches each. Top cooking surface 6 feet by 3 feet.

No. 9x18 double oven range has 8 9-inch holes. Size of ovens 18x26 inches each. Top cooking surface 5 feet by 3 feet.

These are durable, well made ranges, adapted to Vessels, Hotels and Restaurants. SEND FOR PRICES F. & H. BORN, Cleveland, O.

CRESCENT MANUFACTURING CO.,

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CYCLONE STEAM FLUE CLEANERS, CRESCENT STEEL TUBE SCRAPERS,

CRESCENT BOILER COMPOUND,

Solidified Lubricating Oil and Positive Feed Cups, Especially Adapted to Steamship Use.

3 AND 5 MICHIGAN STREET, CLEVELAND OHIO.

OFFICIAL NUMBERS AND SIGNAL LETTERS.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION, WASHINGTON, June 9, 1885.

To the Editor of the Marine Record:

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Department, during the week ended June 6, 1885:

Official Number.	Signal Letters.	Rig.	Name of Vessel.	Tonnage. Gross.	Net.	Home Port.
			SAIL VESSELS.			
126,293	.....	Sc.	Carrie May,	35.41	33.64	South Thomaston, Me.
126,295	K D B V	Bk.	Codorus,	675 36	641.59	Baltimore, Md.
135,844	.....	Sc.	Ella G. King,	75,22	71.46	Gloucester, Mass.
135,845	.....	Sc.	Eliza A. Thomes,	92.85	88.21	Portland, Me.
85,884	.....	Sc.	Grover Cleveland,	92 39	87.78	Boston, Mass.
14,437	.....	Sl.	King Fisher,	7.37	7.01	East Patchogue, N. Y.
140,771	.....	Sl.	Laura L.,	5.83	5.54	Norwalk, Conn.
91,767	.....	Lug.	Maria Carmen,	5.99	5.69	New Orleans, La.
91,768	.....	Sc.	Mabel Keniston,	82.54	78.32	Gloucester, Mass.
91,769	.....	Sc.	Mystery,	23.11	21.96	Brashear, La.
110,337	.....	Sc	Newport,	12.43	11.81	Key West, Fla.
			STEAM VESSELS.			
106,362	.....	St. y	A. W. Burch,	37.68	25.33	Buffalo, N. Y.
106,363	.....	St. s.	Andrew T. Gale,	13.70	9.07	Port Sherman, Mich.
3,317	.....	St. s.	Bristol.	144.91	76.17	Charleston, S. C.
126,294	.....	St. p.	Cornelia H.,	136.04	89.91	Portland, Me.
140,772	.....	St. y.	Laura May,	11.82	5 91	Rochester, N. Y.
91,766	.....	St. s.	Medea,	54.02	27.01	Norwalk, Conn.
110,676	.....	St. y	R. C. Barkley,	16 56	13.13	Charleston, S. C.
			UNRIGG'D VESSELS			
39.960	.....	C. bt.	Alphonse Gravel,	.....	.....	Whitehall, N. Y.
59.419	.....	Scow.	Tinker,	8.35	7.94	Sand Beach, Mich.
66,021	.....	C. bt	Zelia D Lafayette,	94.48	80.76	Northumberland, N.Y.

JARVIS PATTEN, Commissioner of Navigation.

J. C. GOSS,

[SUCCESSOR TO ED MAYES.]

Sail Maker and Rigger.

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OVER H. D. EDWARDS & CO.

First class accommodation for storing vessel outfits. Fire proof building.

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Sail Makers and Riggers.

DEALERS IN WIRE ROPE, PATENT DUCK, AND CORDAGE.

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COMMISSIONER OF NAVIGATION.

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Treasury Department, No. 92,
Washington, D. C.

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CAPT. EDWARD MAGUIRE,
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Grummond's Mackinaw Line.

1885. Steamers of the above line 1885.

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W. E. COMER, Master,	J. R. JONES, Master,
LEAVES DETROIT	LEAVES DETROIT
Every Tuesday, 9 p. m.	Every Saturd'y, 9 p m.

FOR MACKINAC, ST. IGNACE, CHEBOYGAN. Rogers City, Crawford's Quarry, Presque Isle, Alpena, Black River, Alcona, Harrisville, Oscoda, Sand Beach, Forestville, Forister, Sanilac, Lexington, Port Huron, St. Clair, and Marine City, connecting at Cheboygan with steamers for Petoskey and Charleyvoix; at Mackinac with steamers for Sault Ste Marie, Manistique, Escanaba and Green Bay.

For Toledo Steamer FLORA leaves Detroit every Sunday evening at 9 o'clock. Returning leaves Toledo Tuesday at 8 o'clock a. m.

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D. M. BECKER & CO.,

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VESSEL AGENT AND BROKER,

Duluth.

Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at **Duluth, Agate Bay** (new iron ore port), **Port Arthur, Washburn, Ashland,** and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

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ROOM 6, 190 SUPERIOR ST.,

CLEVELAND, OHIO.

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Cleveland, Ohio

The Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building.]

A. A. POMEROY, Editor and Proprietor.

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Invariably in advance.

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Articles, letters and queries on all subjects are solicited.

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CLEVELAND, OHIO, THURSDAY, JUNE 18.

SURFACE FRICTION.

It is generally understood that all efforts at marine architecture are continuously pointing to increase of speed, both for the navy and mercantile marine. The problem of the best lines for a ship's hull to give maximum load and minimum resistance has occupied the attention of our naval architects since the early days of navigation, but without any great results as regards novelty or the attainment of the success that is merited by so much concentrated thought; no radically new lines or great difference in effective speed has yet been evolved. Before the discovery that friction was one of the prime agencies in moving a train of loaded cars on rails, the use of cogs was considered a great essential, that the propelling wheels must move in these set grooves. Therefore, in the rapid propulsion of a boat friction, not to assist but retard, has finally come to be considered as an important factor for consideration by naval architects. The main difficulty in this problem seems to be that the chief resistance is almost entirely due to surface friction, and as this is dependent upon tonnage displacement, it appears almost impossible to obtain large carrying capacity without a proportionately immersed hull section, as, in whatever direction this friction surface may be arranged, it can have very little effect upon the total area of the surface immersed. An easy entering and issuing run seems to be approximately the lines to which more or less all our marine architects come back in principle. There are, however, those who believe that great improvement in vessels, in their capacity for speed without loss of their carrying capacity, may be obtained by modifications of the lines of the hull of the vessel. A Geneva builder has been experimenting many years with a view to obtaining the lines best adapted to speed in steam launches, and certainly has produced results which give promise of ultimate success. One of the essential points in his efforts is to form a very shallow vessel with a deep deadwood keel, and with regularly inclined entering lines, under the comparatively flat bottom of the hull, from the bow to the stern, and the results are very peculiar. At 12 miles per hour the power required for this boat is the same as for any ordinary boat, but above that speed it scores an immense advantage over any other boat with which it has been compared, the thrust of the boat being no greater at 17 miles per hour than it was at 12. This at first sight seems impossible, as at the last rate, 17 miles per hour, it would require one-half the power that is exerted for an ordinary boat driven at such speed. The only explanation that offers for this result, as has been defined by the builder, is that an ordinary vessel alters her trim and sinks at the stern with increase of speed, whereas the boat under consideration, owing to its inclined lines, rises both at the bow and stern similarly, and thus greatly diminishes the submerged surface. The maximum point of resistance then, with this boat is 14½ miles per hour, and above this the resistance falls away, this fact being supported by the observation that beyond that point the decrease of the amidships cross section immersed, and consequently of the surface friction, becomes very manifest. This peculiar fact of decrease of resistance, with a certain maximum of speed that has been arrived at is by no means new, however, as the same theory was entertained and its truth verified in France during the reign of Louis XIV. by experiments with flat bottomed canal boats, when, after a tremendous effort to produce a certain speed the power needed for propulsion fell off in a most remarkable manner, the boat having raised itself out of the water, as it were, thus producing a corresponding reduction in resistance. Further quest for high speed boats has led one inventor to add two wings or keels to the side of the vessel in imitation of the flying fish, not to beat the air but by the inclination of their plane to lift her out from the water by the resistance of the air at great velocities. With a plane of this nature the inventor hopes to produce a vessel with which he can speed 36 miles per hour. In this case the deadwood is prolonged to a very great distance behind the vessel, as the lifting of the boat would otherwise take her screw or propelling mechanism entirely out of the water.

It is admitted that the steam yacht Stiletto, built by Herschoff, which created such a sensation on the Hudson river last week by her speed, and the ease with which she passed the swift little steamer Mary Powell, (never before beaten,) and other crack yachts on the course, shows great departure in her lines and model from the ordinary construction, and it is believed that she has been laid down after models of the Swiss builder referred to above. The Stiletto is 95 feet over all and 11 feet beam, with a straight bow, and attaining her greatest width a little forward of amidships, diminishing to a point at the stern, which lies low in the water, her nose rising. Her tonnage is 45.56 gross, 22.78 net, and she hails from Bristol, R. I. In her trial of speed she recorded quite 30 miles in one hour and seventeen minutes. Although her construction, if she had the proportions necessary, would not permit her to be a large carrier, it is evident that the architect has, to a certain extent, succeeded in realizing a speed that has never yet been attained by decrease of surface friction and other radical changes, all of which will be closely studied by builders from every section of the country, with a view of adding carrying capacity to boats built after the model.

The New York Sun says: The naval newspapers are devoting columns to the exposure of alleged defects in the new iron clad Ajax, which the designers had frequently boasted would be the type of future war vessels. The cost of construction of the vessel amounted to $2,500,000, yet after several trials she either refuses to answer her helm or goes in an opposite direction to that contemplated by her officers. Her movements are always uncertain and very eccentric, notwithstanding continued puttering with her machinery and steering gear by her builders to put her in proper trim. Recently, while on a trial trip, after having been in the hands of her builders, who stated that she would certainly answer all the requirements of a first-class man-of-war, she ran among and nearly destroyed a whole fishing fleet which was cruising in the vicinity. It was only through the utmost exertions of the fishermen that they were able to keep their vessels from being run down by the Ajax, two of them being actually scraped by the man-of-war. The Admiralty has since warned naval officers and seamen generally, that it is dangerous for the Ajax to accompany any other vessel.

The Canadian government has decided to reduce canal tolls one-half for the balance of the season to place the St. Lawrence route in a position to compete with the United States for the export grain trade. This reduction will amount to about one-quarter of a cent a bushel. There is still discontent that the whole tolls have not been removed. Barge transportation from Kingston to Montreal will be reduced one quarter of a cent. The harbor commissioners of Montreal will abolish wharfage dues, as last season, making in all three quarters of a cent reduction on the present rates from Chicago to Montreal. This will enable the St. Lawrence to compete with Erie. The question of abolishing canal tolls altogether will be pressed upon the government.

England's Queen has accepted the resignation of the Gladstone ministry, and the Earl of Salisbury has been asked to form a new cabinet. It will now be in order for the tories to show that they did not approve the Gladstone policy in the complications with Russia, and European papers announce a belief that the present peace negotiations will be broken off and the conflict forced if possible.

Americus Warden has been appointed supervising inspector of steam vessels for the seventh district, with headquarters at Cincinnati. Mr. Warden has filled the office of superintendent of water works at Cincinnati, and is a practical engineer and mechanic.

[*Continued from 1st Page.*]

DETROIT.

Special to the Marine Record.

June 16.—Matters concerning the steamer Saginaw, since her departure from here for Chicago, are somewhat of a mixed character since her arrival at that port. Owned and sailed from here for several years past, and immediately under the eye of Mr. Cook, supervising inspector, it is probable that he would not have permitted her departure from here with an excursion party without knowing her seaworthy condition and the number of passengers she should be allowed to carry. On her arrival at Chicago, however, she came under the surveillance of the local inspector of that port, who, upon hastily looking over the steamer, concluded she was not all that she should be, and flatly determined that she should not be permitted to carry the number of passengers she had been previously granted, and upon referring the question back to headquarters at Detroit, the Chicago inspector's decision has been ruled out. There are some fine points about this matter which only a rigid examination can fully determine.

The movement of the shipping passing this port the past few days has been fairly active, quite a number calling here to replenish their supply of coal. Within the past three or four days no less than ten steamers have coaled at O. W. Shipman's large wharf and good dispatch given. They were the steamship Minneapolis, steamers Passaic, Bruno, M. D. Ward, Otsego, Kittie Haight, Porter Chamberlain, Massasauga, Island Belle, and Oneida.

Captain A. Muir, of Port Huron, and Captain W. B. Morley, of Marine City, both well known ship owners, were in this city Monday, on business matters.

Raft towing through the lakes is becoming more conspicuous this season than last, while the weather to that end has been all that could be desired. The tug Winslow, of Grummond's line, is at present en route with a ratt from Lake Superior, containing three million feet, consisting of round logs, and destined for Cleveland. She will probably arrive in the St. Clair to-day, as she was seen as far along as Presque Isle on Sunday by the steamer Flora. The tug Mocking Bird, of Moffat's line, is also actively engaged in raft towing, and while this employment is considered fairly remunerative, the towing of vessels is quite up to the standard of last season thus far.

The tug Champion passed down on Sunday night, with the schooners M. E. Tremble, Ellen Spry, Angus Smith, G. G. Houghton, and Monterey, the tow bills aggregating $697; also the tug Martin Swain with schooners Thomas Gawn, Pathfinder, A. B. Norris, and Delaware, the bills amounting to $650.

The steam yacht Pastime has just returned from her cruise to Mackinac with her party of excursionists, who had a pleasant time.

The steamer Island Belle should by no means be omitted from the list of those plying to and from this port. She makes daily trips between this city and Gibraltar, calling at all the landings. She leaves Detroit at 5 p. m. and Gibraltar at 9 a. m. She is quite commodious, has good speed, and her master, Captain S. Whipple, is a gentleman, well informed on nearly all the chief topics of the day.

The revenue steamer Fessenden has returned to her anchorage in the offing, after a brief absence, but what has been accomplished in the meantime I am unable to say.

The barge Iron Cliff has just come out of Detroit drydock where a leakage was attended to. She landed a cargo of iron ore at Wyandotte, at which time the trouble was discovered.

During the past week instances have been numerous of steamers and vessels meeting with difficulty in the St. Clair river, what is known as Herson's island being the chief obstacle. The steamer Oregon and her tow found that place and, after vainly trying to release herself, was compelled to send for the tug Oswego at Detroit which got her off. Yesterday the steamer Idlewild reported the steambarge Superior with a tow, grounded some three miles below Algonac and the Oswego endeavoring to get her afloat. The only harm resulting from difficulties on the St. Clair is delays and the expense of getting released, which, in some instances, amount to no inconsiderable sum.

Murphy Brothers, tug owners in this city, have been advised of the safe arrival at Collingwood of the tug Kate Williams with the steambarge Erin which was in difficulty recently on Lake Superior.

It was stated recently in some of the papers that the Detroit Drydock Company had a contract for the construction of a freight steamer for the Flint & Pere Marquette railroad, but as yet nothing definite has been arrived at.

The tug Torrent was towed here from Bar Point by the Kitty Haight, in a disabled condition. The Torrent had at the time a large raft in tow, and in the locality named broke her piston rod.

The reporting of vessels passing Detroit, as conducted by O'Neil & Arsenau, has given the best of satisfaction this season, and nothing escapes their attention night or day.

A rock, designated as "Campbell's Rock," has just been discovered, with thirteen feet of water over it, lying northeast, distant two nautical miles from the northeast extremity of Cape Smith, Mantoulin island.

Captain J. G. Kiah, inspector of life saving stations for the eleventh district, was in this city on Saturday.

Mills' harbor tugs are doing a fair share of towing through the rivers, and are always on hand for services of any kind.

Excursion parties from all sections are becoming quite prevalent, and more especially by the steamer Evening Star from Toledo, and the Star line boats from Port Huron and Sarnia. It may also be noted that the Lake Superior Transit steamers are looming up brightly with passengers to Lake Superior.

The schooner Pandora was twice released from stranding at Fighting island, by the tug Kittie Haight, while coming up the river the other day. It appears to be much easier to find such places than it is to get away from them and always entails considerable cost.

The new steel steamer Mascotte, to ply on the Maumee, made a trial trip here with entire satisfaction, and left to commence on her route.

The steambarge A. A. Turner, with her barges, stranded on the middle ground at the head of Detroit river, but got away without outside aid after a brief delay.

The arrivals of coal vessels have been quite numerous for a few days past, and several discharging daily along the river front.

The tug W. A. Moore, of Murphy's line, is en route with a raft of square timber from Saginaw, destined for Port Colborne, thence through Welland canal to Lake Ontario.

Advices have just been received here that Murphy's tug Gladiator had released the schooner Mary Battle, ashore since last fall on Lake Superior, and had taken her to Houghton for temporary repairs. The Balize, of the same line, is en route with a large raft from St. Ignace for Tonawanda.

The repairs on the propeller Wisconsin, which are being carried out at the Detroit drydock are well nigh completed, and it is probable will be finished the present week.

The steamer Keweenaw has left here for Buffalo, to commence plying between that port and Green Bay, in connection with the propeller Toledo. She is commanded by Captain John A. Sloan, with James F. Snow, mate.

Yesterday (Monday) the barge James H. Prentiss was launched from John Craig's shipyard at Trenton. There was a large attendance and the launch a complete success, with refreshments. She will be towed by the steambarge Oswegatchie, and, as previously stated, in the lumber trade.

Hall.

TOLEDO.

Special to the Marine Record.

The new steel steamer Mascotte, built expressly to run on the Maumee river from Perrysburg, ten miles above here to Point Place, a popular club house eight miles below, arrived here. Her owners gave a complimentary excursion to the members of the Board of Trade, city and county officials and the press. The Mascotte is a twin screw steamer, built by the Detroit Drydock Co. in five weeks and was described in this paper at the time of her launch. All of her appointments are of the latest design, and she is a model of beauty. She commenced her regular trips Sunday. Her officers are as follows: Captain Al Fitts; mate George Goss; engineer George McNelly; clerk John R. Gibbs.

ERIE.

June 15—The revenue cutter Perry went into commission to-day and as her pennant reached the masterhead her crew was called to the rescue of William Kelley and William Pendergast, who were saved with difficulty from drowning in a gale.

The United States ship Michigan steamed out of the harbor for Buffalo this evening, and will lay there for two weeks after which she will return to Erie and then go up the lakes.

EAST SAGINAW.

Special to the Marine Record

June 16.—There was an interesting and exciting contest on the river Friday evening last between the tugs Willie Brown and the Standard, formerly belonging to the Standard Oil Company of Cleveland. During the afternoon the two boats had a race on the river in which they kept well together. In the evening Captain John Devaney, of the Brown, and Captain Jas. Bell, of the Standard, had a friendly discussion over the respective merits of the two boats which ended in a wager of $25 being made that one could out pull the other. The trial was at once ordered, each skipper invited a few friends and up the river they went. Steam was soon away up, as it were, and when opposite Lee's mill they were hitched stern to stern with about forty feet of line between them. It was 8:45 when the signal "go" was given. Each throttle was instantly thrown wide open and the rush of escaping steam hissed defiance to the laws of navigation, while the showers of black diamonds that poured from the funnels of the boats was a sight to behold. The Standard groaned and labored under the strain to which she was subjected, and after about two minutes work lost an inch of ground. Captain Devaney perceiving the fact, gave a shrill toot of triumph, Engineer Eggert dropped the handle of the lever long enough to look over the side and assure himself that the Brown was steadily gaining headway, only to return the next instant to renew his exertions in the way of progression. A spurt, another shriek of the triumphant whistle which expressed the feelings of those on board, and the Willie Brown was master of the situation. The Standard lost with every stroke of her wheel, and was soon towed down the river to the bridge, stern foremost. The tooting of the boat led many to believe a fire was in progress in some of the extensive lumber piles that line both sides of the river for miles, and when the captor and captured arrived at the bridge the structure was surrounded with sightseers.

The iron tug Record took out five barges Saturday night. Captain Bates, who lost the barge Matilda for one trip, is now towing her again, the owners of the Matilda having come to the conclusion that Captain Bates' tug was making better time than the average craft in the stone trade.

Freights remain the same and vessel men generally are contented, but think an extra shilling would not be out of the way. It is probable that no change will be made until fall, as the supply seems to keep the boats going in good shape.

Captain Porter Stewart, the vessel broker, has chartered the schooner Pensaukee to take lumber from this city to Sheboygan, Wis., at private rates.

Buffalo loads have been offering quite freely during the week, and a large number are loading for there.

The large lake tug Natt Stickney, belonging to the dredging contractors, Carkin, Stickney & Cram, of this city, has returned from her trip to the St. Lawrence river with dredge No. 3, that is working on a government contract there. The Stickney was steeple compounded during the winter by Messrs. Bartlett & Co., of this city, and an agreement was made to pay the owners $100 per day for any lost time that should occur after the machinery was accepted, for any repairs that should be needed. The Stickney has been at the dock three days, receiving a new valve to her high pressure steam chest, and it is thought that somebody is money out. SHAW.

DULUTH.

The dredge brought up from the Sault a short time ago for repairs was ready to begin business yesterday, but some careless workmen left a cold chisel in one of the pinion wheels and on the machinery being set in motion several of the teeth of the wheel were broken out. Williams & Upham have sent to Portage lake for a new wheel and the dredge will be delayed several days in consequence.

It is reported here that next month the Canadian Pacific steel steamers Alberta, Algoma, and Athabaska will begin regular trips to Duluth.

Receipts of coal this week are 16,850 tons. Shipments of flour, 59,207 barrels; wheat, 430,825 bush.; ore from Two Harbors, 9,629 tons; flour shipments from Washburn, 16,000 bbls.

PORT ARTHUR.

After this trip the Sarnia boats will run straight through from the Sault, thereby making much better time than formerly. The North Shore trade compelled them to call at several ports for which they had considerable freight and passengers, but that business is pretty well over and except in case of fog or other accidental delay they will make regular time in future.

CLAYTON.

Special to the Marine Record.

June 15.—The United States steamer Bibbs made us a friendly call last week, looking after the boys' papers. The officers are vigilant in their duties.

The steamboat inspectors were here inspecting a number of yachts and steamers.

The steamer St. Lawrence commenced her regular trips on June 15 on the Cape Vincent, Clayton & Alexandria Bay route.

The steamer Jessie Bain went to Deseronto Sunday morning with a number of the American Canoe Association.

Mr. Eugene Bastian has placed a chime whistle on the steamer Maynard.

The steamers Rothesay and Prince Arthur are being painted. Several officials connected with the steamers say the boats will be fitted out at once for business.

The tug Cariboo, with a tow of barges, sprung aleak going up Lake Ontario and put into Stony Island. Her stern pipe gave out. The captain went to Ogdensburg and got the tug Nasmit and went to her assistance.

D. J. Waldron, chief engineer of the steamer Magnolia, arrived here on Friday morning to spend a few days. He is a Clayton boy.

The steamer Magic made her last trip on the Cape Vincent route on Saturday, June 13, and her route now will be from Clayton, Round Island park and Thousand Island park.

The steamer Jessie Bain now makes two round trips between Clayton & Alexandria Bay.

Lew Kenyon received papers on Friday of all crafts of 20 tons and under. He will handle the throttle on Mr. Johnson's new yacht which has been named the "Sirius," which signifies the brightest of stars. She will make a trial trip this week.

Captain Craig has leased the steamer Star and will be ready by July 1st. Her route will be from Picton to Kingston, Gananoque, Clayton, and Alexandria Bay, touching at the parks.

Many complaints are being made about the Canadian Royal mail boats taking all the river on the American side as usual. The steamer Corsican endeavored to make kindling wood of the steamer Maynard one day last week at Alexandria Bay, by running into her, breaking her transom cabin, which she will haul off this week for repairs. These narrow escapes appear far too frequent to be attributed to mere chance. If I remember right this boat has shown a disposition to crowd other boats to the wall during the last few years. The Island Belle, the St. Lawrence and the Jessie Bain are examples of this carelessness or stubbornness. The Mayard goes to Kingston for repairs, and the John Thorn takes the route.

A steam yacht for J. L. Sayles is being constructed at the yard of Hon. L. D. Sherman in Rome. This yacht will be used on the St. Lawrence.

The steamer Calumet will probably be here from New York before long. Clayton will have a fine fleet of steam yachts this summer. B.

MILWAUKEE.

Special to the Marine Record.

June 16—The tug Coe has arrived with the burned steamer Grace Grummond. Captain Gorman reports that when in mid lake he passed about fifty thousand feet of lumber. He saw no wreckage to indicate a disaster.

Vessel masters report the present as the most foggy season for many years, an almost continual fog hanging over Lake Michigan.

Vessel masters from below report continual fog from the straits to this port.

The schooner Lucerne was struck by lightning and her mizzen top was broken off, but no other damage was done.

The steambarge R. P. Ranney yesterday after unloading and while going down the river, struck the Sixth street bridge, which was open at the time. The lever struck the bridge tender and broke his legs and ribs and dislocated a shoulder. The bridge was badly damaged.

The schooner Maggie Thompson ran into the south approach of the Wells street bridge last night as she was being towed down the river astern of the propeller Jewett. Her bobstays, headgear and jibboom were carried away, and the big planks across the tops of the protection piles were cut almost in two. The jibboom extended over the protection rail into the midst of a crowd of people waiting for the bridge to close. By quick dodging they managed to escape injury.

The schooner Anna Maria had a new forefoot put on at the Milwaukee shipyard. This was the extent of the damage she sustained on Fisherman shoal.

The stock of wheat in store at Milwaukee is 3,000,000 bushels.

BUFFALO.

Special to the Marine Record.

The schooner A. J. McBrier which cleared with a cargo of coal for Sandusky the 14th got hard on Horseshoe Reef. She was released by the tug Briant without much damage and arrived at her destination in due time.

The new schooner Polynesia Captain William Moore, arrived here on her maiden trip on the 14th and cleared light to load coal at Ashtabula for Duluth.

There was quite a fleet of Duluth grain vessels in port this week and movements about the harbor were very active.

The largest transaction that has been made in Buffalo for a long time, says the Express, was effected at the Continental Insurance Company's agency Friday. It grew out of the loss of the propeller Michigan in Lake Michigan last winter. Besides having risks on her cargo, the Continental Company had a $50,000 risk on the vessel's hull. Mr. W. B. Dimick, as attorney for Lorenzo Dimick, general agent of the Continental, drew the company's check for the full amount placed on the vessel's hull by the company. This is the largest draft ever paid by any one company for any one loss on the lakes. As this transaction represents a fortune, it is interesting to know some of the steps taken. The Michigan, which was the property of the Detroit & Grand Haven Railroad Company, was insured by the Continental agents at Detroit for $50,000. As the sixty days from the time the loss papers were presented were up Friday, a loss draft, as it is called, was sent down from the owners of the vessel, which they had received from the Detroit agents. It came in at the Farmers' & Mechanics' Bank, and an assistant cashier was sent up to Mr. Dimick's office for the check to cover the amount. When Mr. W. B. Dimick took his pen to sign the check the cashier got up very close and watched the operation, as though it had been a delicate affair in surgery, and he was visibly relieved when it was done The check was drawn on the Third National Bank, and had to be certified, after which it was converted into a New York draft. The Continental Company holds in exchange for this amount a bill of sale for two thirds of the Michigan, which as she went down in some 300 feet of water, will be sold very cheap if anybody wishes to buy. The other third is held by other companies who held a risk of $25,000 on the Michigan.

Captain Quick has bought out Wilson's interest in the schooner Fleetwing and is now sole owner. She had been stripped at Wilson, Lake Ontario, but is now again in commission. She is to load coal here for Sandusky.

The United States steamer Michigan, which arrived on the 16th, will remain two weeks, after which she will proceed on her cruise up the lake.

Some encouragement is found in the fact that Bell, Lewis & Yates are preparing to fill a contract with Port Arthur parties for 25,000 tons of hard coal and 10,000 tons of soft coal. This is the first coal shipped from here to Port Arthur, and this firm has never shipped any hard coal by lake.

As the propeller Buckeye was not insured by Smith & Davis against fire, the company does not consider itself liable. They think, however, she was covered by fire insurance in another company.

The Tioga will be ready for loading Monday. She took on her fuel yesterday.

Coal freights remain unchanged at 65 cents to Chicago, and several boats were chartered at that rate yesterday. Canal freights are dull at 3¼ and 3 cents for wheat and corn respectively, to New York.

The schooner Millard Fillmore has been sold by the insurance companies to John R. Sullivan, of Detroit, for $1,200. She was insured for $5,000, equally divided in the Continental and Boston Marine, although the latter company, before her loss, failed to report the risk to the pool. The Fillmore has cost the underwriters about $6,000. I.

FRANKFORT.

Special to the Marine Record.

June 15.—A terrific squall passed over Lake Michigan this morning. The fishing fleet started for shelter, but one smack was capsized and sunk. The owner Ingbigt Rovig, was drowned. His son was rescued. Deceased was a former vessel captain and leaves a large family.

The schooners Mishicott, Clara, George Wescott, Industry, and Maggie Johnson sailed last night. Owing to the storm the Industry was driven back for shelter.

The United States lighthouse supply steamer Dahlia, Commander Cook, called here on the 11th inst., to leave supplies for Peerhead light, and also at Point Betsy.

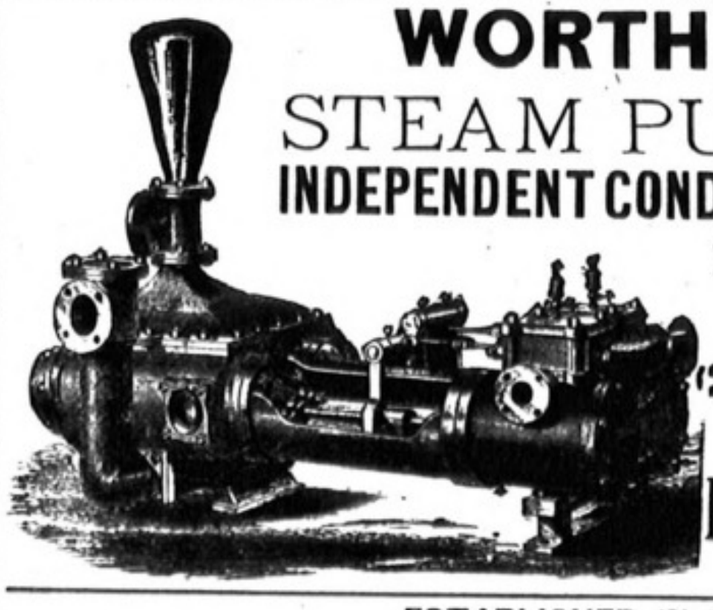
On the night of the 9th a bright fire was seen out on Lake Michigan about 10 p. m. It seemed fifteen miles away. The tugs Hannah Sullivan and D. P. Hall steamed out toward it, and after going ten miles the light suddenly disappeared. The tugs cruised around, but found nothing, and what it was is still a mystery.

BURMEISTER.

CHEBOYGAN.

June 16—The barge Buckeye, coming out of Georgian Bay Saturday afternoon with schooner Skylark, struck a rock on Manitoulin Island, and laboring heavily, burst a barrel of kerosene oil in her hold and caught fire and with her cargo of ties was completely destroyed. The barge Tilly took off her crew and took her consort in tow for Chicago. The Tilly coaled here and passed up this evening. The Buckeye was built in Cleveland by Quayle & Martin in 1856 and rebuilt in 1882, measured 352 tons classed A2 and was owned by Palmer & Fuller of Chicago. Valued at $18,000. She left Chicago a week ago for Manitoulin Island, towing the schooner Skylark. When she met the mishap she was on her return trip with a cargo of cedar Palmer & Fuller purchased her from E. Eldred & Co. She made her first trip this spring to Ogdensburg with a cargo of corn. This was her second trip this season and Captain Jenks' second trip in her. In the fall of 1883 the Buckeye had a narrow escape from foundering off Buffalo. She was caught in a terrific gale of wind with her consort, the York State. Both weathered and were towed into port. The Buckeye was insured for $15,000 in three companies.

A very interesting event took place at our water works crib, Chicago, Tuesday, in the marriage of Captain Charles McKee's youngest daughter, Lucy A. McKee, to George H. Brown, son of Captain Robert Brown, of this city, formerly for many years of Ashtabula. Many friends of the happy couple were present and a very pleasant evening was spent. Visitors to the crib will miss the newly made bride, with her kind, genial manner and pleasant smile.



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HISTORY OF LAKE NAVIGATION.

BY J. W. HALL.

Written for the Marine Record:

CHAPTER XXI.

There was nothing beyond the usual routine of events that occurred during the navigation of 1835. Of course business was gradually on the increase, emigration continued to assume a lively aspect, moving toward the far west, while vessels as well as steamers carried a fair share of that class of travel. There were five steamers added to the lake tonnage, which were as follows:

Steamer Robert Fulton, of 368 tons and high pressure, was built at Cleveland, and commanded by Captain Robert Hart.

The Columbus, of 394 tons, high pressure, built at Huron, and sailed by Captain Augustus Walker.

Charles Townsend, 342 tons, low pressure, built at Buffalo. One peculiarity of this boat was that of having three smoke stacks, ranged directly opposite each other, though it would seem that this was not the kind of improvement that materially added increased speed, which was not beyond eight miles an hour. Captain Simeon Fox was her master.

Steamer United States, of 366 tons, high pressure, built at Huron, Captain Asa E. Hart.

Chicago, 186 tons, high pressure, built at St. Joseph, on Lake Michigan, and plied for a time between Chicago and the former port, but was finally purchased by Captain John F. Wight, and brought down Lake Erie to run as opposition between Buffalo and Erie. She was rather a tame affair, and scarcely worthy the patronage of the lower class of emigrant travel. She was wrecked on Lake Erie in the fall of 1842.

W. F. P. Taylor, of 95 tons, and high pressure, built at Silver Creek, to ply between Buffalo and the former port, commanded respectively by Captains O. D. Simons, T. J. Richards, and John Vail, the latter taking her to Lake Michigan. She was wrecked at Micigan City in the fall of 1842.

Thames (British) of 160 tons, high pressure, built at Chatham to ply between Amherstburgh and Chippewa, on the Niagara river, two miles above Niagara Falls. She was commanded respectively by Captains H. Van Allen and George R. Williams. During the Canadian rebellion, in the winter of 1838, she was moored a short distance above Windsor, and was there boarded by armed "patriots," so called, and burned. She was never rebuilt, but her machinery was transferred into a new hull named the Kent.

The steamboat Commodore Perry exploded twice that season, killing six persons at Buffalo and outside on Lake Erie.

The steamer General Porter, during the Canadian excitement, was sold to that government and fitted out as an armed cruiser, and after the restoration of peace to that country was resold to Captain Charles Gager, of Buffalo, and converted into a propeller. While in the British service she was called the Toronto.

The season of 1835 wound up with one of the most terrific gales that ever visited the lake region, and in proportion to the number of vessels employed caused a greater destruction of life and property. This occurred in November, and originated in the W.S.W. region, and prior to reaching a locality announced its approach like the sound of an immense train of cars. At Buffalo the creek rose to a height of twenty-two feet, floating steamers and vessels into some of the main streets, crushing canal boats under bridges, while on the west side of the harbor, which was inhabited, dwellings were swept away and the occupants drowned, with scarcely a life saved.

A vessel called the Free Trader, with thirteen passengers on board beside the crew, took her departure from Port Burwell, Canada, for Cleveland, and was struck by the gale and twice capsized, righting each time. After the storm she was discovered drifting off Dunkirk, and was taken into that port with one sailor still alive and clinging to the tiller. Of the passengers was Mr. Richardson, owner of the cargo, and two families.

The schooner Comet, owned by the Wilkensons, of Buffalo, left Madison dock, below Fairport, with fifteen tons of iron and five tons of ashes. The crew consisted of six sailors and one passenger. She is supposed to have foundered off Dunkirk, as two topmasts were afterward seen in that locality, and several articles recognized as belonging to her floated ashore. The crew were Robert Haggerty, master, aged 22; John Berrin, aged 35, mate; Philip D. Silvy, aged 45, seaman; Joseph Boclaire, aged 24, seaman; John Decker, aged 21, seaman, and the cook, whose name was not learned. The unfortunate passenger, it was afterward learned, was Truman Chittenden, about nineteen years of age, who on the 9th of that month, left his uncle's, Henry Chittenden, of Monroe county, in Ohio, on his way to Williston, Vt., to visit his friends and attend school.

The steamboat North America was driven on the beach at Erie. She was commanded by Captain G. Appleby.

The steamers Sandusky, Henry Clay, and Sheldon Thompson were floated on the bank in Buffalo harbor and seriously damaged. The North America, prior to going ashore, had let go her anchors and attempted to ride out the gale at Erie, but the wind, increasing in its fury, soon parted her cables, while the passengers and crew gave themselves up as lost, but by a providential circumstance it was suggested to scuttle the boat to prevent her jumping over the pier, to which the salvation of the boat may be ascribed.

The schooner Two Brothers was landed on top of the Buffalo pier and became a total wreck.

Vessels which were outside, as soon as the cyclone set in, tried to reach the nearest port, and when forced to Buffalo, on entering the harbor an immense amount of damage was done, as the creek at that time was crowded with vessels. Boats were run into and sunk, while the whole extent of the loss of life ranged far into the hundreds. The flood was the highest known since 1816 and the most destructive. Wharves and piers at various lake ports were demolished and scarcely a vestige left. At Portland harbor two persons, a Mr. Crossgrove and William McHenry were drowned from the pier on account of the sudden approach of the high water.

The schooner Godolphin, freighted with salt, was wrecked at Fairport and crew lost.

The schooner Lagrange, a fine vessel, commanded by Captain Canchlos, with a full cargo of merchandise from Buffalo for Detroit, was capsized near Point Au Pellee and sunk about seven miles from shore. All hands perished except a man and boy who were taken off the mast next morning, nearly frozen to death. The boy subsequently died. The vessel was never recovered. Beside the captain the names of only three others were ever learned, which were John Young, Peter Malish and Jack Horton.

The storm on Lake Ontario was very severe, and the casulties large, although its greater force was well nigh spent. On that lake the schooner Robert Bruce, owned in Henderson, Jefferson county, left Kingston, Canada, for some port up the Bay of Quinte, in ballast, was wrecked and all on board were lost. Benjamin Chandler, master and part owner, and others of the crew, names unknown, beside Elias Everett, a passenger, of Watertown, were of the lost. The wreck, after the storm, drifted ashore on Henderson Point, and the coat of Mr. Everett, hanging to a nail with his wallet, containing $719, was recovered.

The schooner Medora, owned in Oswego, from up the lake, laden with wheat and walnuts, went ashore near the mouth of Big Sandy Creek, and all hands lost. The bodies of a man and woman were found in the cabin. The startling events of that fearful storm throughout the lakes with the countless loss of life and property, would fill a good sized volume.

The navigation of that year was closed on the 25th of November. The steamboat appointments, aside from those above named, in 1835, were as follows:

Governor Marcey, Captain Sam Chase; agent, Pratt & Taylor.

Sandusky, Captain T. J. Titus; agent, R. Hollister.

Perseverance, Captain Jas. Gear; agent, Wilkesons.

Andrew Jackson, Captain S. F. Atwood, to and from Detroit.

Niagara, Captain Levi Allen, to and from Buffalo.

Ohio, Captain Charles Burnett, to and from Buffalo.

O. Newberry, Captain Amos Pratt, to and from Detroit.

Pennsylvania, Captain J. Fleeharty, to and from Buffalo.

General Porter, Captain Walter Norton, to and from Buffalo.

D. Webster, Captain Morris Tyler, to and from Buffalo.

Henry Clay, Captain C. C. Stanard, to and from Buffalo.

Superior, Captain A. Allen, to and from Buffalo.

Michigan, Captain C. Blake, to and from Detroit.

New York, Captain George Miles, to and from Buffalo.

Uncle Sam, Captain J. M. Lundy, to and from Buffalo.

Wm. Peacock, Captain T. Wilkens, to and from Erie.

There were other smaller steamers on the Detroit river, plying in either direction, and in connection with stage routes in many instances, but which form nothing of interest in lake history, beside being irregular in their movement.

The following table, compiled from the records in the office of the register of the treasury, shows the number and tonnage of steamboats built on the northern lakes, 1816 to 1836, inclusive:

Year.	No.	Tonnage	Year.	No.	Tonnage
1816.....	1	231.57	1827....	....	.....
1817.....	.....	.....	1828....	....	.....
1818.....	3	690.27	1829....	.....	.....
1819.....	....	.....	1830...	1	93.82
1820.....	.....	.....	1831.	1	31.41
1821....	....	.....	1832....	4	752.74
1822.....	1	346.38	1833...	7	1583.45
1823.....	1	48.63	1834....	10	2158.49
1824.....	....	.....	1835....	5	1385.70
1825.....	1	124.67	1836....	2	413.57
1826....	4	891.63			

BUSINESS ON THE MISSISSIPPI.

CAIRO, ILL., June 15.

Special Correspondence of the Marine Record.

Thanks to the followers of Galen I am once again able to work and have a splendid place, night clerk in the Yarnell House, this city, with a salary of ten dollars a week, which is as good, all points considered, as a "striker's" berth on a steamboat.

I have been particularly interested of late by the perusal of the many items passing along the journalistic channel of the west, portraying the decline of western steamboat travel. One journal, in a cartoon, illustrates the death of river commerce, as an old and superannuated horse, turned out on the public domain to die after a life of faithful servitude. Even the Marine Journal, which claims to be the champion of western commerce, rather espouses the cause of pessimists, and gives the river men many unsavory morsels of gossip, detailing the deplorable future of maritime interests. The New Orleans News item man lays bare the fact that St. Louis and New Orleans trade has dwindled away to nothing, and he goes on to give the long list of boats that used to run in this trade in 1859. Very true, as to the number of boats, there has been some falling off in the business since '59, but counting the actual tonnage, the trade has increased since that time. The boats named by the Item would not average over 1,500 tons each, and in the best of times the trade never demanded more than two boats a day, which would give at the outside fourteen boats a week, and give each boat 2,000 tons, (which is greatly in excess), would give 28,000 tons a week, or over 112,000 tons a month. To-day the estimate is given at 120,000 tons a month, as shipped by river from St. Louis to lower river points. Whenever a Mississippi Valley Transportation Company's tow boat leaves St. Louis with a tow, she takes the freight of from three to five ordinary steamboats, such as run in '59, and with one steamboat and crew does the work. Nor must the readers of the RECORD think them slow, for a tow boat of this line will set a tow of eight or nine thousand tons of freight in New Orleans from St. Louis, in four days, which is in advance of either railroad or packet. In addition to the barge line comes the famous Anchor line, who send a 2,000 ton boat to New Orleans every other day. And in further addition there are still a few outside boats in this trade. As compared to the general advance of commerce incidental to the development of the great Mississippi basin, the river trade has not kept apace with the times, but as compared to the tonnage of "before the war," it has advanced. In my next I will give the opinions of some prominent steamboat men on this matter.

THE SECOND ENGINEER.

AUTOMATIC STEERING APPARATUS.

An exhibition was given in Brooklyn recently of an automatic steering apparatus of improved construction. It consists of a cylinder having communication with a compressed air supply, a piston playing in said cylinder, operating the tiller wheel chains and of a main rotary arranged to be operated by an auxiliary cylinder and valve, regulated by electro magnets, which are actuated by a current controlled by the movements of the needle of a mariner's compass. In addition to the compass control, an interlocking system on the same circuit is so arranged as to operate the magnets by the movements of the wheel in the pilot-house, or by a hand device upon the bridge. This system is so arranged that when the automatic device is in operation, the circuits of the hand devices do not act, and when the wheel is in operation, the compass circuit is broken; when the lever on the bridge is moved, the other devices are inoperative, but when returned to the central position, the devices previously in operation will resume, all automatically. By this system the ship is easily controlled by the officer on the bridge, at will and instantly. The "kick" of the rudder from wave force is deprived, it is claimed, of its destructive influence by the resistance of compressed air in the cylinder against the piston head. The only machinery requiring attention is the compresser, which, being placed in the engine room, is constantly under the eye of the engineer on duty. It is supplied with an automatic speed and pressure-governor combined, so that a uniform pressure is always maintained in the supply reservoir. The captain's cabin is supplied with a tell-tale mechanical compass, which, being set to the course ordered, will ring an alarm if the ship deviates from her course from any cause. The advantages claimed for this invention are: An automatic system complete in itself, which will govern the movement of the vessel with absolute accuracy and the utmost despatch and which is so arranged that it may be used independently both in the pilot house and on the bridge. By this arrangement only one of the systems can be operated at a time. The mechanism is simple, not liable to get out of order, and silent in operation.

The trial proved in every way satisfactory to those who witnessed it, among whom were many steamship men and others interested in nautical affairs. The exhaust air can be used for ventilation between decks and in the fire-rooms of steamers. The apparatus used is soon to be placed upon the United States steamer "Despatch." It is the invention of Mr. C. H. Washburn, chief engineer.—*Maritime Register.*

COLLAPSE OF A DIVING SUIT.

Captain Thomas Donnelly arrived from Owen Sound recently, where he left the steamer Owen Sound, which he and his father succeeded in raising a short time ago.

While the former was engaged in diving and repairing the vessel he met with an experience that nearly cost him his life, and which he will always remember. He was on the bottom of the lake and working away at the steamer, with a man above holding the signal rope, the pulling of which warns the diver to come to the surface. The rope is attached to the helmet or head gear, and the signal man gave it two jerks, expecting Captain Donnelly to respond and rise, but he did not feel the "call," consequently, the man, thinking that the rope had got entangled, gave it a hard pull, and the result was he twisted the helmet and off it came, letting the water into the diving suit with a rush. The captain realized what had happened and at once set to work to relieve himself of the suit, but the main buckle being behind his back and between his shoulders he was unable to reach it. He endeavored to reach his shoes, each of which was loaded with twenty pounds of lead, but the suit was so cumbersome that he could do nothing. He says that he then gave up all hope of being rescued and that the thoughts of home and family flitted through his mind as he made several desperate attempts to tear the straps from their fastenings, but it was all of no avail. From that time until he opened his eyes on deck and saw his father bending over him, with despair written on his countenance, he was unconscious. He soon recovered and listened to the narrative of his rescue, which was in effect that when the helmet gave way there was general alarm, and at once they set to work to draw him up by the air pipe, which was attached to the waist of the suit. It was some minutes before they succeeded in getting him to the surface, as they had to be very cautious. The water was twenty feet deep, and if the captain had been down much longer he would have been drowned. His numerous friends are delighted to learn of his escape, but at the same time they regret to hear that he met with such a serious accident.—*Kingston News.*

COMMODORE PERRY'S STATUE.

A special dispatch to the New York Herald from Newport, R. I., said: "The statue to be erected to the memory of Commodore Oliver Hazzard Perry has arrived here. It will be placed somewhere on Washington square. The house in which Commdore Perry used to live is next to the Perry house and is now occupied as a meat market. The statue is of bronze. It pictures the naval hero in a striking attitude. He is represented as he reached the deck of the Niagara after his perilous trip in a small boat from the disabled flagship Lawrence. The commodore is hatless, his right arm is uplifted, his index finger extended, showing clearly that he is in the act of giving directions to those who were about him. He wears a jacket adorned with epaulets, his sword being buckled on, while his large pistol is stuck in his belt. The right foot is firmly fixed, the left one being set back a little. From the Lawrence, Perry had brought his commodore's flag, which is wound around his left arm and over the left shoulder, the ends being grasped tightly in his hand. It is a critical moment of the engagement, and Perry's countenance wears a bold, yet anxious expression. The height of the figure, including the raised arm and pointed finger, is 11½ feet. The pedestal and base will be about 12 feet. Unlike the majority of statues, this one is cast in one piece only. This was accomplished by the Benvenuti Cellini process at the government foundry in Florence. The statue will not be unveiled until the 10th of September, the anniversary of the battle of Lake Erie. Until that time at least, Mr. Turner, the sculptor, will remain in this country. He has been absent some fifteen years."

Captain T. J. Craig's fast new excursion steamer Star will be splendidly fitted up for the comfort and convenience of a large list of passengers. No regular meals will be served, but she will have refreshment tables provided with cake, coffee, tea, candy, etc., which will be sold at about one-half the price usually asked at lunch counters. Nothing but light wines and ales will be sold on board, so that she will virtually sail under the Scott Act (as amended) flag.

The United Empire was considerably delayed by an accident which happened some seventeen miles off Whitefish Point. The bottom blew out of the air pump, and she had to lie to for some time, until sufficiently repaired to steam up here under high pressure. The injury is being repaired by Woodside Bros.—*Port Arthur Sentinel.*